FIRST

Substitute for form 1449A/PTO & 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Com	plete if Known	
Application Number	10/622,652	
Filing Date	July 21, 2003	
First Named Inventor	Michael SETTON	
Examiner Name	Unassigned	
Attorney Docket Number	015290-756	

	(use as many	sheets	as necessary)
Bheet	1	of	2

B 17 2004	मुंगान		U.S. PATENT DOCUMENTS	
Examiner Initials	0	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)
The state of the s	3,731,163		Shukus	05-1993
705	4,670,355	•	Matsudaira	06-1987
10 h	4,734,340		Saito et al.	03-1988
(2)	5,091,763		Sanchez	02-1992
7/ //	5,189,503		Suguro et al.	02-1993
	5,292,673		Shinriki et al.	03-1994
60	5,316,977		Kunishima et al.	05-31-1994
20	5,596,214		Endo	01-1997
<u> </u>	5,677,015	·	Hasegawa	10-1997
25	5,688,724		Yoon et al.	11-1997
100	5,702,972	 	Tsai et al.	12-1997
PP	6,107,656		Igarashi	08-2000

			FOREIGN PATENT DOCUME	ENTS		
Examiner	Document	Kind Code	O	Date of Publication	Translation	
Initials	Number	(if known)	Country	(MM-DD-YYYY)	Yes	No
<u>L</u> p	0844647	A3	EPO	05-1998	1	
RD	60-107838		JAPAN	06-13-1985		
. , 4						
		_				

	NON-PATENT LITERATURE DOCUMENTS					
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
RD	Alers, G.B. et al., "Nitrogen plasma annealing for low temperature Ta₂O₅ films", Applied Physics Letters, vol. 72. no. 11. 1308-1310. 16 March 1998					
RP	Campbell, S.A., et al., "MOSFET Transistors Fabricated with High Permitivity TiO₂ Dielectrics, IEEE Transactions on Electron Device, Vol. 44, No. 1, 104-109, January 1997.					
Rp	Cava, R.F. et al., "Enhancement of the dielectric constant of Ta₂O₅ through substitution with TiO₂", Nature, Vol. 377, 215-217, 21 September 1995					
RD	Chatterjee, A. et al., "Sub-100nm Gate Length Metal Gate NMOS Transistors Fabricated by a Replacement Gate Process", IEEE, 1997					
RP	Gan, JY et al., "Dielectric property of $(TiO_2)_x$ - $(Ta_2O_5)_{1-x}$ thin films", Appl. Phys, Lett. 72 (3), 19 January 1998, 332-334					
RR	Hu, J.C. et al., "Feasibility of Using W/TiN as Metal Gate for conventional 0.13μm CMOS Technology and Beyond", IEEE, 1997					

Examiner / / / / / / / / / / / / / / / / / / /	Date	9-5-14	
Signature W WWY	Considered	1 7 Jul	
	100 44 5 5	5 5 5 5 5 5 5 5	1 14 - 41 10 4 1 -

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

(P	Substitute for form 14	49A/PTO & 1	449B/PTO		Com	plete if Known	
Q,,	~ ~~	F	IRST		Application Number	10/622,652	
	- CHINA OF	RMATI	ON DIS	CLOSURE	Filing Date	July 21, 2003	
FEB	STAT	EMEN	BY A	PPLICANT	First Named Inventor	Michael SETTON	
•			y sheets as ne		Examiner Name	Unassigned	
A.	Storet	2	of	2	Attorney Docket Number	015290-756	
A I	HADE	 					

	NON-PATENT LITERATURE DOCUMENTS					
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
RP	Joshi, P.C., et al., "Structural and electrical properties of crystalline $(1 - x)$ Ta ₂ O ₅ - xAl ₂ O ₃ thin films fabricated by metalorganic solution deposition technique", Apply. Phys. Lett. 71 (10), 8 September 1997, 1341-1343					
RI	Lo, G.Q. et al., "Metal-oxide-semiconductor characteristics of chemical vapor deposited Ta ₂ O ₅ films, Appl. Phys. Lett. 60 (26), 3286-3288, June 1992.					
RP	Meng, J.F., et al., "Raman Investigation on (Ta ₂ O ₅) _{1-x} (TiO ₂) _x System at Different Temperatures and Pressures", J. Phys. Chem Solids, Vol. 58, No. 10, 1503-1506, 1997					
RP	Momiyama, Y., et al., "Ultra-Thin Ta₂O₅/SiO₂ Gate Insulator with TiN Gate Technology for 0.1µm MOSFETs", 1997 Symposium on VLSI Technology digest of Technical Papers					
RP	Properties of Metal Silicides, INSPEC emis datareviews series No. 14, 1995, Maex and Van Rossum Editors, pp. 103-104					
RP	Ting, C.Y., et al., "Gate Materials Consideration for Submicron CMOS", Applied Surface Science 38 (1989) 416-428					
RP	Ushiki T., et al., "High-Performance, Metal-Gate SOI CMOS Fabricated by Ultraclean, Low-Temperature Process Technologies", SPIE, Vol. 2875, pp 28-38, Aug. 1996					
N	Vogel, E.M., et al., "Modeled Tunnel Currents for High Dielectric constant Dielectrics", IEEE Transactions on Electron Devices, Vol. 45, No. 6, 1350-1355, June 1998.					
RP	Pratt, I.H., "Thin-Film Dielectric Properties of R.F. Sputtered Oxides", Solid State Technology, (Dec. 1969), vol. 12, no. 12, 49-57					
40	Reddy, P.K, et al., "Dielectric Properties of Tantalum Oxynitride Films", <i>Physica Status Solidi A</i> , July 1979, vol. 54, no. 1, pages K63-K66					
RP	Vlasov, Y.G. et al., "Analytical applications of pH-ISFETs", Sensors and Actuators B, (Dec. 1992) vol. B10, No. 1, pages 1-6.					
RP	Patent Abstracts of Japan, vol. 098, no. 011, September 1998, JP 10 178170A					
RP	Chinese Official Action dated April 18, 2003 for Application No. 99808151.5					

Examiner Signature	en hour	W	Date Considered	9-5-09	
	DV - 18V -1	<i>1</i>	OUTSIDETED	<u> </u>	b citation if not in